



UNITED STATES
NUCLEAR REGULATORY COMMISSION
WASHINGTON, D.C. 20555-0001

June 24, 2010

Mr. Paul A. Harden
Site Vice President
FirstEnergy Nuclear Operating Company
Beaver Valley Power Station
Mail Stop A-BV-SEB1
P.O. Box 4, Route 168
Shippingport, PA 15077

SUBJECT: BEAVER VALLEY POWER STATION, UNIT NO. 2 – IMPACTS TO THE
REVIEW SCHEDULE REGARDING THE SPENT FUEL POOL RERACK
LICENSE AMENDMENT REQUEST (TAC NO. ME1079)

Dear Mr. Harden:

The purpose of this letter is to inform you of the factors that are impacting the Nuclear Regulatory Commission (NRC) staff's review schedule and to request a new proposed schedule for completion of the subject license amendment request (LAR).

By letters dated April 9, 2009 (Agencywide Documents Access and Management System (ADAMS) Accession No. ML091210251) and June 15, 2009 (ADAMS Accession No. ML091680614), FirstEnergy Nuclear Operating Company (the licensee) submitted an LAR to modify the Beaver Valley Power Station, Unit No. 2 (BVPS-2) Technical Specifications (TSs). The proposed amendment would modify TSs to support the installation of high density fuel storage racks in the BVPS-2 spent fuel pool, which will increase the total storage locations from 1,088 to 1,690.

The licensee requested approval of the LAR from the NRC by April 15, 2010. Per the licensee's request, the NRC staff expedited the review by contracting a technical reviewer from Oak Ridge National Laboratory for assistance.

By letters dated December 4, 2009 (ADAMS Accession No. ML093280914), February 16 (ADAMS Accession No. ML100380002), March 19 (ADAMS Accession No. ML100760584), and June 11, 2010 (ADAMS Accession No. ML101380546), the NRC staff issued requests for additional information (RAIs) to address several concerns. Of those concerns, the major technical issues were the following: (1) the use of non-conservative methodologies in the mechanical accident analyses without providing substantial technical justification, (2) the use of spent fuel pool concrete properties that are inconsistent with the BVPS-2 licensing basis, (3) the lack of adherence to NRC guidance with respect to the spent fuel pool rack structural loading combinations, (4) not incorporating the Haut Taux de Combustion critical experiment data in the criticality code validation as documented in NUREG/CR-6979 (ADAMS Accession No. ML082880452), (5) the use of non-bounding moderator temperatures for depletion, (6) the use of non-bounding axial burnup profiles, and (7) not incorporating the neutron absorber surveillance uncertainty in the criticality analysis.

In addition to issuing RAIs and conducting several conference calls, the NRC staff conducted an audit to review supporting design documents, in an effort to resolve the technical issues. The licensee has been supportive in coordination of the conference calls and the audit. However, the NRC staff cannot continue its review without the revised Holtec Licensing Report, the remaining due RAi responses, and needed supplemental information to certain RAi responses, as seen in the table below.

Milestone Date Timeline

NRC RAi	Partial Response	Final Response	Supplement Needed	Current Status
12/4/2009		1/18/2010	No	The NRC staff received the complete response.
2/16/2010	3/18/2010	6/1/2010	Yes	The licensee is going to supplement their original LAR with a revised copy of the Holtec Licensing Report.
3/19/2010	5/3/2010	5/21/2010	Yes	The licensee is going to supplement their original LAR with a revised copy of the Holtec Licensing Report, as well as, provide supplemental information to some of the RAi responses.
6/11/2010				The licensee requested a 60-day response period.

To date, the NRC staff has completed a substantial portion of the review of the application. The original request for the completion of the review of the LAR was April 15, 2010. However, due to the delays associated with the RAi responses to the February 16 and March 19, 2010, RAi letters, the NRC staff has not been able to complete its review. We ask that you submit a new proposed schedule for your planned submittals and keep the NRC staff informed if this requested schedule should change or if any additional delays are foreseen. The NRC staff expects to complete its safety evaluation within 5 months of the final submittal from you. However, this expected timeline assumes that there will be no additional RAis required.

If you have any questions regarding this issue, please contact me at (301) 415-1016.

Sincerely,



Nadiyah S. Morgan, Project Manager
Plant Licensing Branch I-1
Division of Operating Reactor Licensing
Office of Nuclear Reactor Regulation

Docket No. 50-412

cc: Distribution via Listserv

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/RA/

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*Via email

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